

$c = 1$). Pour ces deux alcaloïdes, les identifications ont été faites par comparaison de spectres IR, UV et MS avec ceux d'échantillons de référence.

Les fractions Et₂O-MeOH (9:1) contiennent au moins quatre alcaloïdes. Deux ont été isolés par chromatographie préparative: 3 déhydrochrolifuanine V, M^+ 436, spectre UV: 227, 283 (e), 290, 315 nm, identifiée par comparaison avec un échantillon authentique (R_f en CCM, spectre MS); 10 méthoxy dihydro corynanthéol VI, $F = 166-167^\circ$, $[\alpha]_D -8^\circ$ (CHCl₃, $c = 1$), identique à un échantillon de référence (CCM, RMN, spectre MS).

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ALKALOIDS OF *PICRALIMA NITIDA*

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Key Word Index—*Picralima nitida*; Apocynaceae; alkaloids; akuammicine; picraline.

Plant. *Picralima nitida* (Stapf) Th. et H. Durand. *Source.* J. Brookman-Amissah, Silviculturist, Department of Forestry, Kumasi, Ghana. *Uses.* Medicinal.¹ *Previous work.* Rootbark², stembark,² leaves² and mature seeds.^{2,3}

TABLE 1. ALKALOIDS OF DIFFERENT TISSUES OF *Picralima nitida*

Plant part examined	Alkaloids identified	Plant part examined	Alkaloids identified
Root bark	Akuammicine Akuammigine* Picracine*	Mature seeds	Akuammicine† Akuammidine**† Akuammigine*† Akuammine*† Picraline† Pseudo-akuammigine†
Stem bark	Akuammicine Akuammidine Akuammigine† Akuammine† Picracine* Picraline Pseudo-akuammigine	Immature seeds	Akuammicine Akuammidine* Akuammigine* Akuammine* Picraline Pseudo-akuammigine
Fruit pods	Akuammicine Akuammidine Akuammigine Picraline Pseudo-akuammigine		

* Indicates isolation.

† Previously reported:²⁻⁵ In addition, deacetyl picraline was obtained from root bark and mature seeds, and akuammiline, and pseudo-akuammicine from the latter tissue. Leaves were reported to contain:² akuammigine; akuammine, melinonine A and picraphylline.

¹ F. R. IRVINE, *Woody Plants of Ghana*, p. 624, Oxford University Press, London (1961).

² G. LEDOUBLE, Thesis à la Faculté de Pharmacie de l'Université de Paris (1964).

³ T. A. HENRY, *J. Chem. Soc.* 2759 (1932).

⁴ T. A. HENRY and T. M. SHARP, *J. Chem. Soc.* 1950 (1927).

⁵ A. F. THOMAS, D.Phil. Thesis, Oxford University (1954).

Present work. The different tissues were exhaustively extracted in a Soxhlet with light petroleum (60–80°) and then EtOH. The different alkaloids were isolated by a combination of column chromatography, preparative TLC and fractional crystallisation according to Henry³ and Ledouble.² The alkaloids were identified by co-chromatography with alkaloid standards employing different solvent systems.² The isolated alkaloids were further identified by m.p. and m.m.p., IR and MS. The results are summarized in Table 1. It is noteworthy that no alkaloids could be detected in leaves, although earlier reports indicate that leaf samples from the Ivory Coast contain alkaloids.² The alkaloid contents of mature and immature seeds are seen to be qualitatively the same. The content of akuammicine was found to be higher in mature seeds than in immature seeds. On the other hand, pseudo-akuammigine was found to be present in a higher concentration in immature seeds. This probably indicates a transformation of pseudo-akuammigine to akuammicine during the ripening of fruits.

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ARACEAE, etc.

CONSTITUENTS OF *COLOCASIA FORMICATA*, *SAGITTARIA SAGITTIFLORA*, *ARNEBIA NOBILIS*, *IPOMOEA PANICULATA*, *RHODODENDRON NIVEUM*, *PASPALUM SCROBICULATUM*, *MUNDULEA SERICEA* AND *DUABANGA SONNERATIODES**

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Key Word Index—Araceae, Alismaceae; Boraginaceae Convolvulaceae; Ericaceae; Gramineae, Leguminosae, Lythraceae; sterols, flavonoids.

Plant. Colocasia formicata (Araceae). *Occurrence.* In many parts of India up to an elevation of 8000 ft.

Rhizome. Light petrol and benzene fraction of EtOH extractive (chromatographed over alumina) gave *hentriacontane* $C_{31}H_{64}$ † m.p. 68° (m.m.p. and IR), *hentriacontanol* $C_{31}H_{64}O$ m.p. 85° (m.m.p. and acetate), *hentriacontanone* $C_{31}H_{64}O$ m.p. 82° (m.m.p., IR and oxime), *taraxerol acetate* $C_{32}H_{52}O_2$ m.p. 294° $[\alpha]_D + 10^\circ$ (m.m.p., IR, TLC, NMR and MS). Deacetylation furnished taraxerol $C_{30}H_{50}O$ m.p. 265° $[\alpha]_D + 5^\circ$; benzoate $C_{37}H_{54}O_2$ m.p. 284° $[\alpha]_D + 35^\circ$. *Lignoceric acid* $C_{24}H_{48}O_2$ m.p. 84°; methylester $C_{25}H_{50}O_2$ m.p. 58° (m.m.p. and TLC). *Sitosterol* $C_{29}H_{50}O$ m.p. 136° $[\alpha]_D - 35^\circ$; acetate $C_{31}H_{52}O_2$ m.p.

* Communication No. 1739 from Central Drug Research Institute, Lucknow, India.

† Satisfactory analysis, IR determined in KBr, $[\alpha]_D$ in $CHCl_3$ and 60 Mcs NMR in $CDCl_3$ with TMS as internal standard.